## **COOLNOMIX**®

## Air-conditioning and refrigeration energy optimisation technology



#### **Benefits**

- Unrivalled energy-saving performance
- Up to 40% reduction in electricity bill
- Reduced carbon footprint
- Fast Return on Investment from 1 month
- Improved temperature stability
- Improved air quality and comfort assurance
- Zero dripping or icing up
- Reliable high-impact technology
- Three-year warranty

### **COOLNOMIX®**

## Stay cool, save money and reduce your business' carbon emissions

COOLNOMIX (

We can deliver up to 40% electricity savings without getting hot

Reduce the energy consumption of

your air-conditioning and refrigeration without affecting the output you need

We help businesses to make big energy and carbon savings without changing cooling needs so that your building users are kept comfortable, equipment stays cool and your produce remains chilled.

**COOLNOMIX®** technology is maintenance free and can be easily installed by our qualified engineers with no disruption to your operation. You can expect up to 40% energy saving on your air-conditioning and up to 30% on your refrigeration without your cooling output being affected.

We keep your people, equipment and produce cool, and your energy budget from overheating



### **Technical**

In most air-conditioning applications, a lot of energy is wasted because the unit's compressor (the main running cost component) runs much longer than is needed. Using our patented process called **Optimized Refrigerant Supply**® (**ORS**®) the advanced **COOLNOMIX**® control device reduces the run-time of the cooling system compressor, therefore, reducing electricity consumption even in the most demanding high and humid environments.

The **COOLNOMIX® ORS**® technology uses two temperature sensors in an algorithmic energy trading control arrangement to monitor the thermodynamic (room or space temperature) and the hydraulic

(refrigerant supply) performance of the connected air-conditioning or refrigeration system. In operation, this algorithmic energy trading approach first uses the room or space temperature sensor to ensure that a required setpoint has been achieved. Subsequently, this temperature sensor ensures that the space is maintained within +/-0.5°C (+/-0.9°F) of the required setpoint. Meanwhile, a second temperature sensor connected to the indoor evaporator coil is used to identify when the compressor has done its useful hydraulic work in producing a supply of high-pressure liquid refrigerant. Using the built-in algorithmic energy trading control, the **COOLNOMIX® ORS**® advanced system then starts and stops the compressor at appropriate times to optimise running costs.



### **Features**

- Dual temperature sensor design delivering exceptional temperature stability
- Auto-detection of cooling and reverse cycle operation
- Sixteen user selectable operating temperatures
- Built-in audible alarm in the event of a cooling failure (alarms can be silenced or turned off
- Quick install with minimal disruption

# Download trial data reports available

#### Contact us...

Insynch Energy Services

Aizlewood Mill

Sheffield

S3 8GG

Office Tel: +44 07857126072

info@insynchenergy.co.uk



www.insynchenergy.co.uk